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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,151	11/20/2003	I-Jong Lin	200312186-1	8992
22879 7590 12/29/2008 HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400				
EXAMINER LIEW, ALEX KOK SOON				
ART UNIT 2624		PAPER NUMBER		
NOTIFICATION DATE 12/29/2008		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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### Office Action Summary

**Application No.**

10/718,151

**Applicant(s)**

LIN, I-JONG

**Examiner**

ALEX LIEW

**Art Unit**

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13-25 is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-893)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

1. The examiner reopens current application for prosecution; reasons discussed below.

2. Response to Applicant's arguments

The applicant stated in the appeal brief:

"Thus, it is respectfully submitted that one of ordinary skill in the art, when faced with combining the teachings of Tomasi with the teachings of Prakash as suggested by the Final Office Action, would not know how to modify Tomasi based on Prakash. In this regard, Tomasi clearly discloses that the content displayed on the display is captured by an image capture device to determine various characteristics of the displayed image while Prakash uses various routines for guessing those characteristics. Thus, Prakash teaches away from using a camera for detecting the characteristics disclosed by Tomasi." The applicant is correct; Tomasi and Prakash are not combinable. Reasons discussed below.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-12 are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. Supreme Court precedent<sup>1</sup> and recent Federal Circuit

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<sup>1</sup> *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876).

decisions<sup>2</sup> indicate that a statutory "process" under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing. While the instant claim(s) recite a series of steps or acts to be performed, the claim(s) neither transform underlying subject matter nor positively tie to another statutory category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process. Claims 1-12 are method claims which are not tied-to any processor and computing device.

#### Relevant Art

Prakash (US pub no 2002/0131495) discloses analyzing said first contents to identify a first set of potentially occluded pixels (see figure 4B, area 408 is the occluded pixels); changing a value of said first set of potentially occluded pixels to generate a modified image on said display (see figure 4E, the pixels that are labeled '1' are the changed pixels); generating said confirmed occluded pixels on said display using a predetermined display value (see figure 4L, area 410 are the final resulting pixels) and Prakash reads on capturing second contents from said modified image displayed on said display with said image capture device (see figures 4A and 4B, the image in figure 4B is the second modified image, it is modified because it is different from the first image, figure 4A).

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<sup>2</sup> *In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008).

Tomasi (US pat no 7,212,663) discloses generating an image on said display (see figure 1, element 110, is the projector used to generate image patterns); and capturing first contents from said image displayed on said display with an image capture device, said image capture device being spaced from said display (see figure 6, 640).

However, as discussed above, Tomasi and Prakash are not combinable; Tomasi teaches a projection array is provided that comprises a plurality of discrete projection elements. An image array is obtained of a scene with the light projected onto it that is coded using the projection array. Correspondence information is determined for each element in the image array, where the correspondence information can be used to determine which of the plurality of elements in the projection array corresponds to a particular image element. The determination of correspondence information for each element in the image array can be made independently of correspondence information for other elements in the image array.

Prakash discloses a method of reconstructing a previously occluded area of a video image frame exposed by the motion of a segment within said image frame. In one embodiment the method involves approximating the color values of the pixels in the newly exposed area from the color values of the neighboring image segments. The process is refined by identifying a set of neighboring segments to the exposed area, called fill segments, that most closely resemble the color values of the pixels within the exposed area. These fill segments are then used to reconstruct the color values of the exposed area.

Prakash does not teach projecting image onto a display and capturing the captured projected image and Tomasi does not contain any occluded region which needed to be corrected.

#### Allowable claims

Claims 1-12 are allowable if it overcomes the U.S.C. 101 rejections.

Claims 13-25 are allowable.

With regards to claim 1, the examiner cannot find any suggestions or motivation for analyzing said first contents to identifying a first set of potentially occluded pixels; changing a value of said first set of potentially occluded pixels to generate a modified image on said display; and capturing second contents from said modified image displayed on said display with said image captured device in combination with the rest of the limitations of claim 1.

With regards to claims 7, 13, 19 and 25, see the rationale for claim 1.

#### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEX LIEW whose telephone number is (571)272-8623 or cell (917)763-1192. The examiner can be reached anytime.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on (571) 272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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12/21/08